

What is claimed is:

1 1. A power supply for use in an electrical apparatus having a plurality of
2 operational modes including a normal mode and a standby mode, the power supply
3 comprising:

4 a DC power unit for outputting a DC voltage;

5 a microcomputer for outputting a mode control signal according to the operational
6 mode of the electrical apparatus;

7 a first power converter, controlled by the mode control signal, for converting the DC
8 voltage output of said DC power unit into at least one operation voltage required for powering
9 a plurality of loads; and

10 a second power converter for supplying said microcomputer with a regulated
11 feedback voltage in the standby mode of the electrical apparatus.

1 2. The power supply as claimed in claim 1, further comprising a switch for
2 controlling an application of the DC voltage output of said DC power unit to said
3 microcomputer through said second power converter, according to the mode of the electrical
4 apparatus.

1 3. The power supply as claimed in claim 2, wherein the DC voltage output of
2 said DC power unit is applied to said microcomputer through said second power converter in
3 the standby mode of the electrical apparatus.

1 4. The power supply as claimed in claim 1, further comprising a voltage

2 regulator for outputting a regulated voltage to said microcomputer in the normal mode of the
3 electrical apparatus.

1 5. The power supply as claimed in claim 1, wherein said second power
2 converter comprises a transformer.

1 6. The power supply as claimed in claim 5, wherein the transformer has a
2 tapped output.

1 7. The power supply as claimed in claim 5, wherein said second power
2 converter comprises at least two power taps.

1 8. The power supply as claimed in claim 7, wherein the at least two power taps
2 of said second power converter are 5V and 12V taps, respectively.

1 9. The power supply as claimed in claim 6, further comprising a feedback
2 circuit connected between the tapped output and an input of the transformer.

1 10. The power supply as claimed in claim 9, wherein the tapped output is a 5V
2 tap.